LACO ASSOCIATES
ENGINEERS • GEOLOGISTS • ENVIRONMENTAL CONSULTANTS

LEONARD M. OSBORNE • CE 38573
DAVID R. GERVAN • CE 57282
DAVID N. LINDBERG • PG 5581/CEG 1895
FRANK R. BICKNER • PG 7428
RONALD C. CHANEY, Ph.D • CE 29027/GE 00934

LETTER OF TRANSMITTAL

TO: HCDEH
100 H Street, Suite 100
Eureka, CA 95501

DATE: November 9, 2005
JOB NO.: 4844.01
PROJECT: Former Zenker-Felt Motors

ATTN:

TRANSMITTED BY: ☒ Mail ☐ Delivered In Person ☐ Fax

No. Copies		Description
1	1.	Contingency Plan for Subsurface Work
	2.	
	3.	

REMARKS:

THIS MATERIAL SENT FOR: ☒ As Requested ☒ Information
☐ Approval ☐

cc: City of Eureka Engineering Dept.
CalTrans
PG&E
Don Murrish
Kelly Martin

By: Jen Gullett
Jen Gullett for Gary L. Manhart

21 W. 4th Street • P.O. Box 1023 • Eureka, California 95502 • 707-443-5054 • 1-800-515-5054 • FAX 707-443-0553
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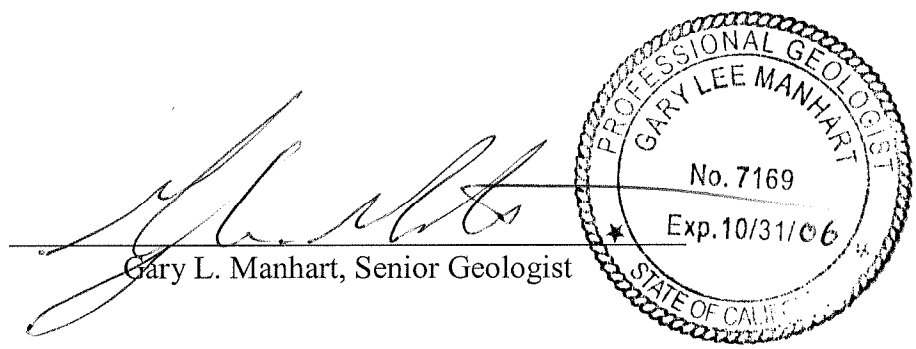
CONTINGENCY PLAN
FOR SUBSURFACE WORK

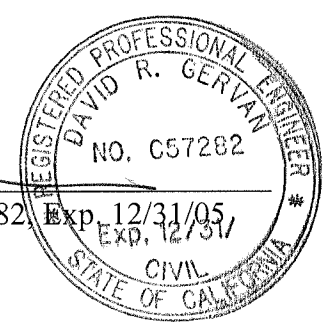
Former Zenker-Felt Motors
22 West 4th Street, Eureka, California

LOP No. 12290

Prepared for:
Don Murrish
925 6th Street
Eureka, California 95501



Gary L. Manhart, Senior Geologist



David R. Gervan, RCE 57282, Exp. 12/31/05

LACO ASSOCIATES
CONSULTING ENGINEERS
21 W. 4th St. · PO 1023 · Eureka, CA 95502 · 707.443.5054

November 1, 2005
Project No. 4844.01

CONTINGENCY PLAN FOR SUBSURFACE WORK

Former Zenker-Felt Motors; 22 West 4th Street, Eureka, California
LOP No. 12290; LACO Project No. 4844.01

INTRODUCTION

The intent of this contingency plan is to protect the health and safety of site workers and resident occupants, as well as the environment. This contingency plan is in addition to all other applicable plans, and does not supersede or negate them. In areas of conflict, the more stringent constraint shall apply.

BACKGROUND

The site is located at 22 West 4th Street, in Eureka, California (Figure 1). The former underground storage tank (UST) was located in the sidewalk in front of the property. One 1,000-gallon waste oil UST (Figure 2) related to the former auto dealership was removed from the site in June 1990 by Beacom Construction of Fortuna, California. The Humboldt County Division of Environmental Health's (HCDEH's) notes from the tank pull indicated that "there was clear evidence of over fill/spill at filler". Additionally, the notes indicated that the tank appeared sound. 15 tem- Fifteen temporary borings were installed between May 2000, November 2001, February 2002, January 24, 2005, and July 29, 2005, to delineate any petroleum hydrocarbon contamination in soil or groundwater originating from the former UST. High concentrations of total petroleum hydrocarbons as motor oil (TPHmo) in soil were reported for samples collected within 10 feet of the former tank cavities.

A sensitive receptor survey has also been completed for this site and did not reveal any potential pathways for contaminant migration or any potential human or ecological receptors within the suspected area of contamination. Given that the remaining contamination is below grade, and appears to be primarily contained in the vicinity of the former tank cavity and under the sidewalk, no threat to human health during normal surface activities is anticipated (for site workers, adjacent property owners and/or current occupants). It should be further noted that over time the contaminant concentrations should decrease by natural attenuation and biodegradation.

AREAS OF REMAINING PETROLEUM HYDROCARBON CONTAMINATION

Areas where petroleum hydrocarbon contamination is known to exist in soil and groundwater at the site is indicated on the attached Figure 3. Complete summaries of all analytical laboratory results are presented in Table 1. If contamination is detected in the area of the delineated con-

tamination, all work will cease and the HCDEH will be notified. Work will only proceed by hazardous materials trained personnel, and with HCDEH approval.

IMPLEMENTATION PROCEDURES

The present owner(s) of the subject property shall provide a copy of this contingency plan to all employees, tenants, contractors, utility companies, and public agencies whose normal work and duties may lead to contact with the petroleum hydrocarbon contaminated soil below ground surface (Figure 3). It is the responsibility of each employee and contractor to become familiar with the contents of this plan. Contractors, utility companies and/or public agencies shall provide a copy of this plan to each of their employees working at the subject property, whose normal work and duties may put them in contact with the petroleum hydrocarbon contaminated soil and/or groundwater.

Site Workers: In the areas indicated on Figure 3, care should be taken to avoid excessive exposure through dermal contact or inhalation during subsurface work and repairs. Major work below ground in the areas indicated, should be undertaken by personnel who have completed the standard (CFR 1910.120) OSHA 40-hour hazardous materials training (HAZWOPER) and, if necessary, an 8-hour "refresher" training update within the past year.

Contractors, Utility Companies and/or Public Agencies: Any and all persons/companies working below grade, who may be expected to be exposed to any of the remaining petroleum hydrocarbon contaminated soil, and/or groundwater, shall prepare a site-specific safety and health plan for the work to be conducted. This contingency plan shall be incorporated into any site-specific safety and health plans prepared.

All personnel whose normal duties may place them in contact with the petroleum hydrocarbon contaminated soil and/or groundwater shall possess documentation of completion of the standard (CFR 1910.120) OSHA HAZWOPER and, if necessary, an 8-hour "refresher" training update within the last year.

All personnel will also possess documentation of a respirator "fit test," and shall be medically certified to wear a respirator while working. The contractor personnel whose work may expect to place them in contact with the petroleum hydrocarbon contaminated soil and/or groundwater (areas noted on Figure 3), shall have respirators fitted with organic vapor cartridges close at hand or in their immediate possession at all times while conducting this work.

The project supervisor or the site safety officer shall conduct and document a tailgate safety session prior to the beginning of work and at least every 10 working days thereafter for the duration of this project. All employees participating in the safety meetings shall sign the attendance sheet for documentation purposes.

Safety discussion will include the code of safe practices, general safety guidelines, safety related practice to air quality hazards and trenching, or excavation work as described in 8 CAC: Appendix A and Article 3. Tailgate safety meeting topics will include a discussion of safety hazards specific to the site, and protection of the site workers from any potential hazards associated with this work.

The Underground Services Alert (USA) shall be notified at least 48 hours prior to commencement of any major subsurface or excavation work. The HCDEH shall be notified at least 5 days prior to any anticipated work in the identified areas of contamination.

In the event of emergency repairs involving the contaminated areas in which delay would cause immediate danger to life, health, property, structures, or the environment, HCDEH and other affected agencies should be notified as soon as reasonably possible as to the nature of the emergency and the proper steps toward resolution.

SITE MONITORING/SAFETY - HYGIENE EQUIPMENT

Site Workers: If a worker detects hydrocarbon odors (a smell of heating or diesel oil) during the normal course of minor repairs or other work in the areas determined to be potentially contaminated, all work shall cease until the site can be monitored by qualified personnel such as contractors, utility companies and/or public agencies, engineers, geologists, or environmental health specialists who have completed the required OSHA training outlined above and have the equipment to monitor the air quality.

Care should be taken while doing any work below the ground surface in the contaminated areas to minimize the potential for dermal contact. In case of dermal contact, the affected area should be thoroughly washed with soap and water. Hands should always be washed following any work in the contaminated area.

Contractors, Utility Companies and/or Public Agencies: When petroleum hydrocarbon contaminated soil is excavated, or otherwise exposed to the atmosphere during major work below grade, or if there are repairs in the areas of soil contamination, routine monitoring of air quality shall be conducted by qualified personnel using the appropriate gas detection and monitoring equipment. A first aid kit in accordance with 8 CAC: Appendix A, and a 10-pound fire extinguisher shall be onsite, with the location known to all project personnel. The standard OSHA poster of emergency telephone numbers shall be posted in full view.

In the event air quality is in question, respirators shall be donned when air quality monitoring in the area of activity indicates a concentration of benzene exceeding 1 part per million (ppm), or total petroleum hydrocarbons exceeding 100 ppm.

PERSONAL PROTECTION

Site Workers: Except as indicated, normal work garments are acceptable. Nitrile or other suitable gloves shall be required and worn where contact with contaminated soil is possible.

Contractors, Utility Companies and/or Public Agencies: Except as indicated, modified Level D personal protection is acceptable, including normal work garments, ankle-high steel-toe rubber boots, safety glasses, and hardhat. Nitrile or other suitable gloves shall be required and worn where contact with petroleum hydrocarbon contaminated soil and/or groundwater is anticipated.

As noted above, all contractor field personnel working within the petroleum contaminated area shall possess a NIOSH approved air purifying half-face respirator, fitted with approved organic vapor cartridges (Wilson R21 or equivalent). Respirators shall be inspected, maintained, stored, and cleaned in accordance with standard procedures and the company respirator protection program. All personnel shall be trained in proper use of the respirator and shall possess documentation of a positive fit test.

WASTE MANAGEMENT

In the event that petroleum hydrocarbon contaminated soil is made accessible during future site subsurface or excavation work, it shall be excavated under the direction of qualified personnel to the extent possible. Small quantities of contaminated soil (less than 2 cubic yards) will be contained within secured 55-gallon drums for proper disposal. Larger quantities of contaminated soil will be stockpiled onsite or, with HCDEH approval, hauled off for immediate disposal.

If soil is stockpiled onsite, the stockpile (underlain and covered with 10 mil plastic) shall be enclosed with a 6-foot minimum height hurricane-rated fencing to limit access to, and contact by, the public until it can be characterized and disposed of as approved by the HCDEH.

If contaminated soil is hauled and disposed of off-site, it shall be done with prior HCDEH notification and approval, and to qualified waste sites by a licensed hauler. Copies of manifests and weigh tickets will be provided to the HCDEH.

LIST OF FIGURES AND ATTACHMENTS

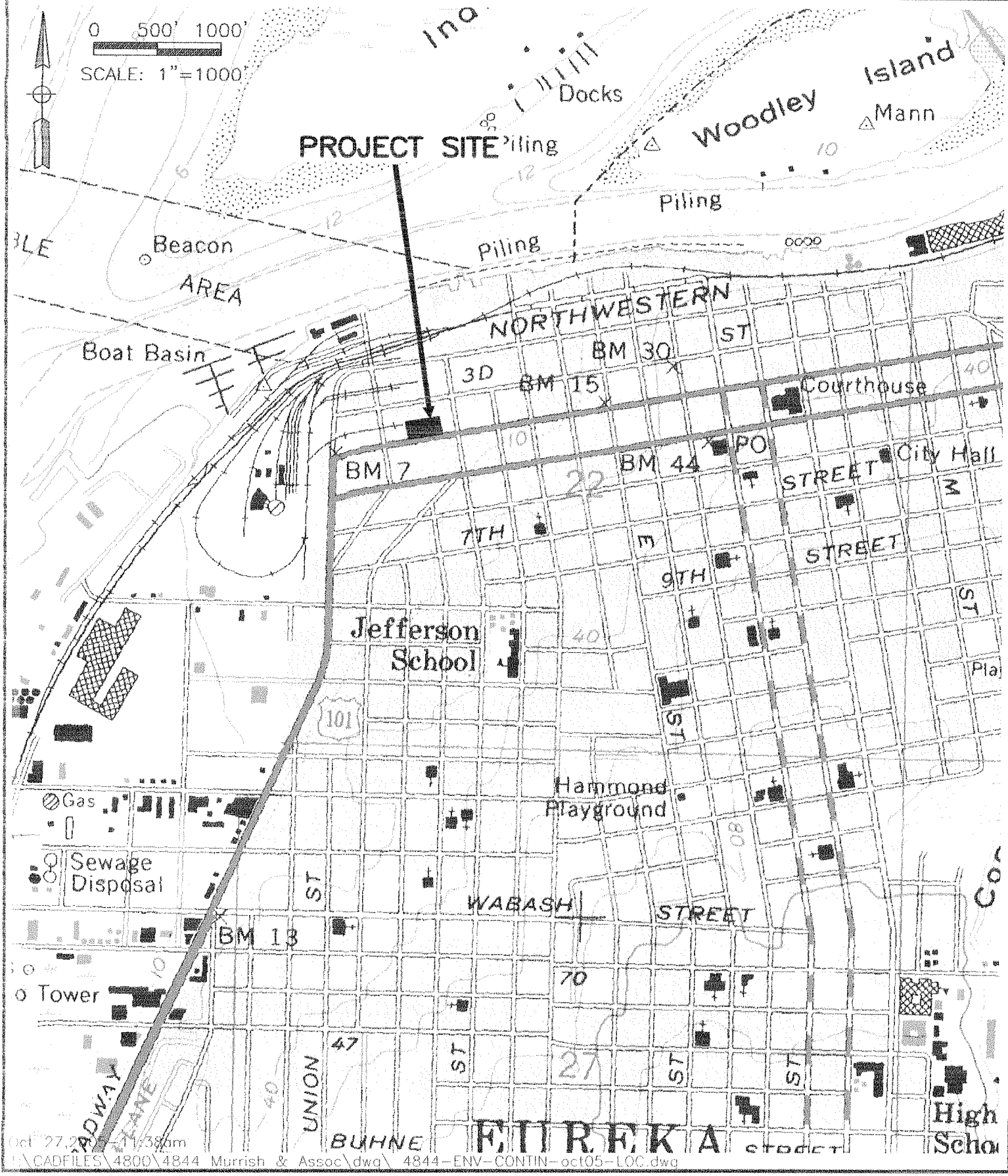
Figure 1 Location Map
Figure 2 Site Map
Figure 3 Soil Contaminant Concentration Map

Table 1 Soil Analytical Results

GLM:jg

P:\4800\4844 Murrish Zenker Felt\Submittals\4844 Contingency Plan.doc

LACO ASSOCIATES CONSULTING ENGINEERS 21 W 4TH ST. EUREKA, CA 95501 (707)443-5054	PROJECT: CONTINGENCY PLAN	BY: RJM	FIGURE: 1
	CLIENT: MURRISH & ASSOCIATES	DATE: 10/27/05	
	LOCATION: ZENKER-FELT MOTORS	CHECK: RJM	JOB NO.: 4844.01
	LOCATION MAP	SCALE: 1"=1000'	



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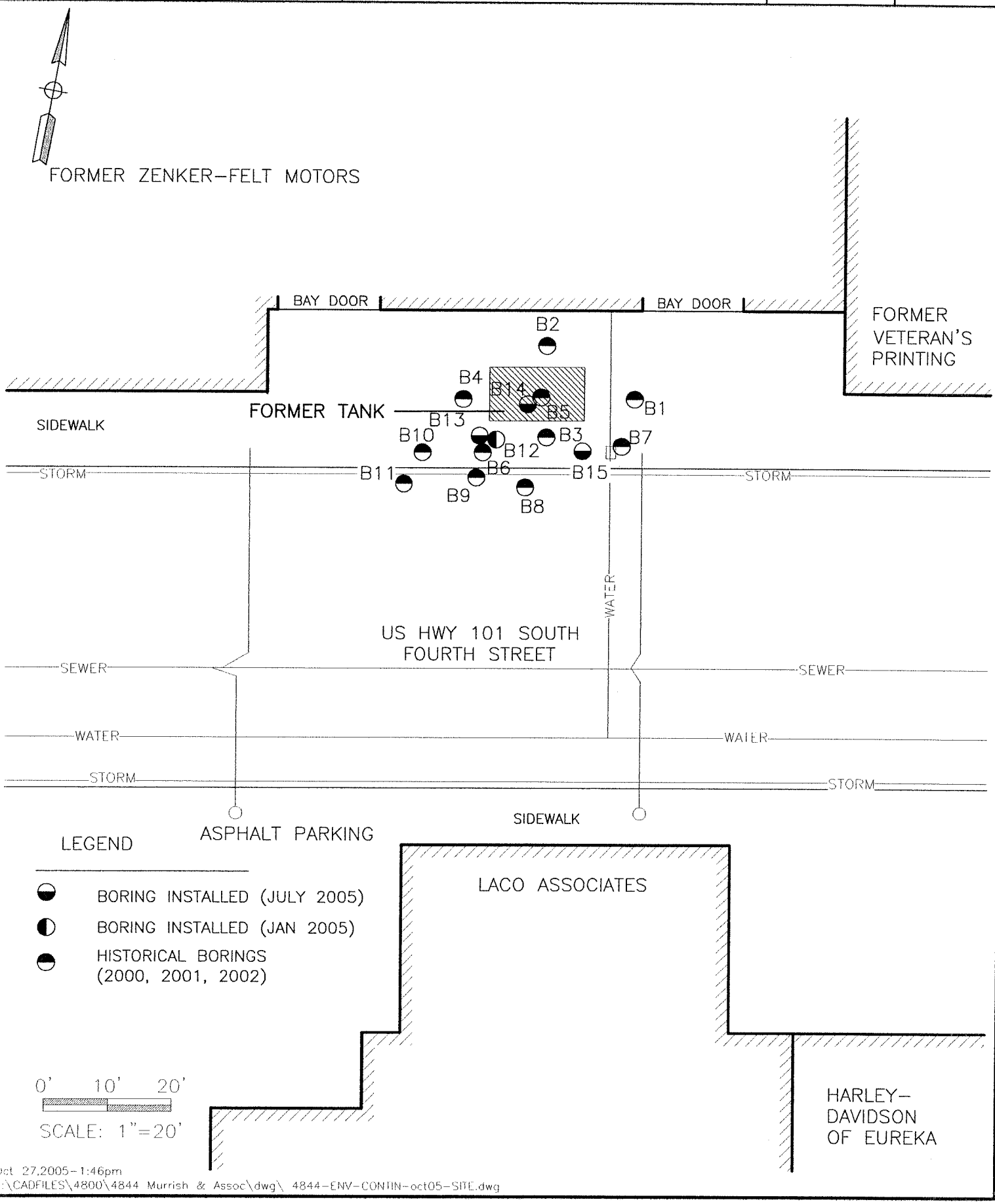
LACO ASSOCIATES CONSULTING ENGINEERS 21 W 4TH ST. EUREKA, CA 95501 (707)443-5054	PROJECT: CONTINGENCY PLAN	BY: RJM	FIGURE: 2
	CLIENT: MURRISH & ASSOCIATES	DATE: 10/27/05	
	LOCATION: ZENKER-FELT MOTORS	CHECK: GLM	JOB NO.: 4844.01
	SITE MAP	SCALE: 1"=20'	



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LACO ASSOCIATES CONSULTING ENGINEERS 21 W 4TH ST. EUREKA, CA 95501 (707)443-5054	PROJECT: CONTINGENCY PLAN	BY: RJM	FIGURE: 3
	CLIENT: MURRISH & ASSOCIATES	DATE: 10/27/05	
	LOCATION: ZENKER-FELT MOTORS	CHECK: RJM	JOB NO.: 4844.01
	SOIL CONTAMINANT CONCENTRATION MAP	SCALE: 1"=20'	

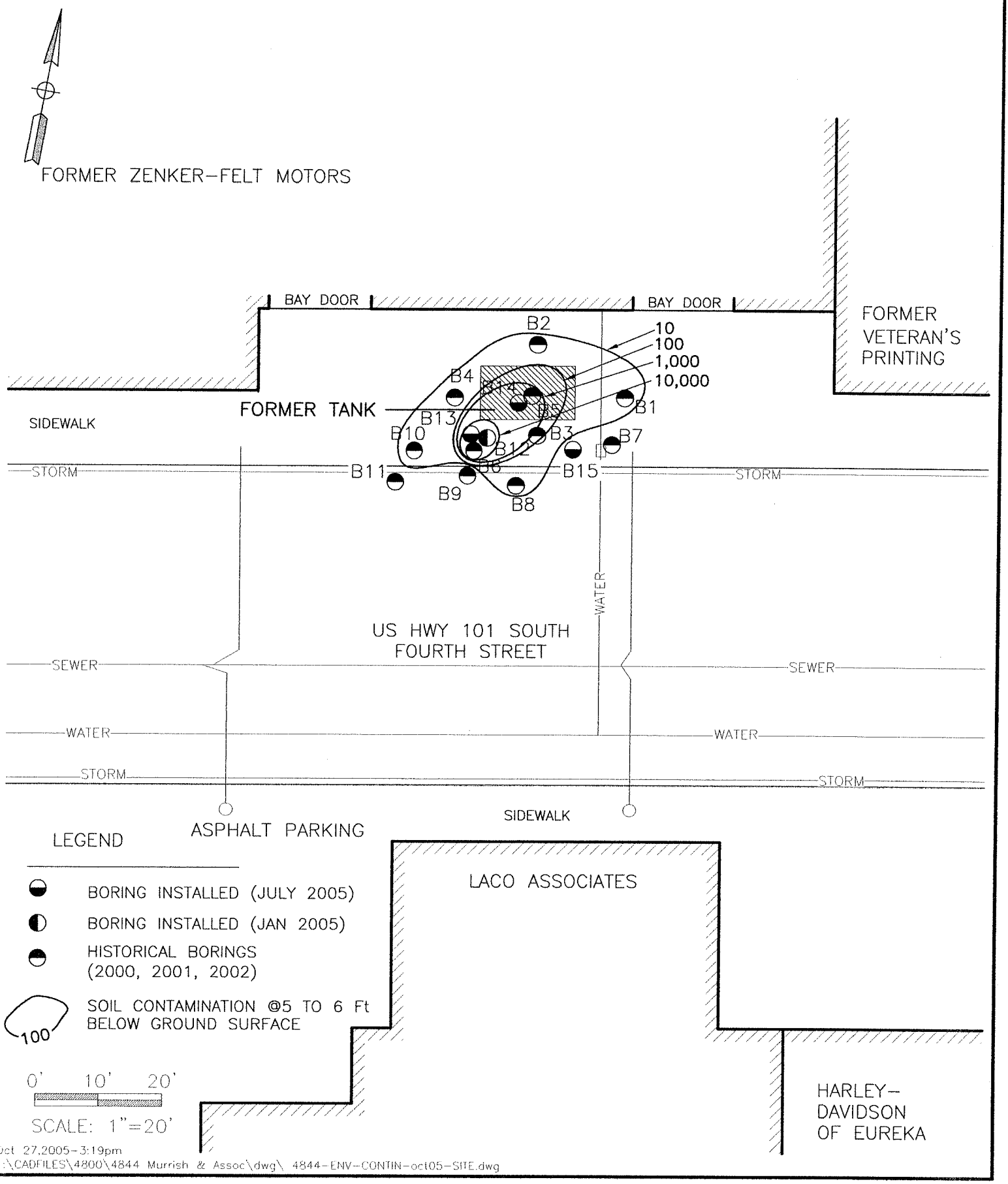

TABLE 1: SOIL ANALYTICAL RESULTS
Former Zenker-Felt Motors
22 W. 4th Street, Eureka
LACO No. 4844.00

Sample Number	Sample Date	TPHg (µg/g)	TPHd (µg/g)	TPHmo (µg/g)	Benzene (µg/g)	Toluene (µg/g)	Ethylbenzene (µg/g)	Xylenes (µg/g)	MTBE (µg/g) +	Halogenated Volatiles (µg/g)
2000 Investigation										
B1 @ 5'	5/17/2000	ND <1.0	ND <1.0	**21**	ND <0.005	ND <0.005	ND <0.005	ND <0.005	ND <0.050	---
B1 @ 10'	5/17/2000	ND <1.0	ND <1.0	ND <10	ND <0.005	ND <0.005	ND <0.005	ND <0.005	ND <0.050	---
B1 @ 15'	5/17/2000	ND <1.0	ND <1.0	ND <10	ND <0.005	ND <0.020	ND <0.005	ND <0.005	ND <0.050	---
B2 @ 5'	5/17/2000	ND <1.0	**1.1**	**32**	ND <0.005	ND <0.005	ND <0.005	ND <0.005	ND <0.050	---
B2 @ 10'	5/17/2000	ND <1.0	ND <1.0	ND <10	ND <0.005	ND <0.005	ND <0.005	ND <0.005	ND <0.050	---
B2 @ 15'	5/17/2000	ND <1.0	ND <1.0	ND <10	ND <0.005	ND <0.005	ND <0.005	ND <0.005	ND <0.050	---
B3 @ 5'	5/17/2000	**16**	**200**	**3,100**	ND <0.005	ND <0.010	ND <0.010	ND <0.010	ND <0.050	---
B3 @ 10'	5/17/2000	**2.1**	**480**	**3,000**	ND <0.005	ND <0.005	ND <0.005	ND <0.005	ND <0.005	---
B4 @ 5'	5/17/2000	ND <1.0	**1.7**	**21**	ND <0.005	ND <0.005	ND <0.005	ND <0.005	ND <0.050	---
B4 @ 10'	5/17/2000	ND <1.0	ND <1.0	ND <10	ND <0.005	ND <0.005	ND <0.005	ND <0.005	ND <0.050	---
B5 @ 5'	5/17/2000	77	**170**	**2,500**	ND <0.050	ND <0.40	ND <0.40	ND <0.80	ND <0.50	---
B5 @ 10'	5/17/2000	ND <1.0	ND <1.0	ND <10	ND <0.005	ND <0.005	ND <0.005	ND <0.005	ND <0.050	---
B5 @ 15'	5/17/2000	ND <1.0	ND <1.0	ND <10	ND <0.005	ND <0.005	ND <0.005	ND <0.005	ND <0.050	---
2001 Investigation										
B6 @ 6'	11/13/2001	**320**	ND <1,000	**26,000**	ND <0.05	ND <0.5	ND <0.5	ND <0.5	ND <0.5	---
B6 @ 12'	11/13/2001	**4.4**	ND <10	**180**	ND <0.005	**0.0062**	ND <0.005	**0.011**	ND <0.005	---
B7 @ 6'	11/13/2001	ND <1.0	ND <1.0	ND <10	ND <0.005	**0.0051**	ND <0.005	**0.0067**	ND <0.005	---
B7 @ 12'	11/13/2001	**1.4**	ND <1.0	ND <10	ND <0.005	**0.062**	ND <0.005	**0.135**	ND <0.005	---
B8 @ 6'	11/13/2001	**1.1**	**1.3**	**27**	ND <0.005	ND <0.005	ND <0.005	**0.0086**	ND <0.005	---
B8 @ 12'	11/13/2001	ND <1.0	ND <1.0	ND <10	ND <0.005	ND <0.005	ND <0.005	ND <0.005	ND <0.005	---
2002 Investigation										
B9 @ 4.5'	2/22/2002	ND <1.0	ND <1.0	ND <10	ND <0.005	ND <0.005	ND <0.005	ND <0.005	ND <0.005	---
B10 @ 5'	2/22/2002	ND <1.0	**2.9**	**34**	ND <0.005	ND <0.005	ND <0.005	ND <0.005	ND <0.005	---
B11 @ 5'	2/22/2002	ND <1.0	ND <1.0	ND <10	ND <0.005	ND <0.005	ND <0.005	ND <0.005	ND <0.005	---
2005 Investigation										
B12 @ 6'	1/24/2005	ND <1.0	ND <1.0	ND <10	ND <0.005	ND <0.005	ND <0.005	ND <0.005	ND <0.005	---
B13 @ 6'	7/29/2005	**14.0**	**260**	**6,300**	ND <0.005	ND <0.005	ND <0.005	ND <0.005	ND <0.005	All ND
B14 @ 6'	7/29/2005	**1.4**	**120**	**1,900**	ND <0.005	ND <0.005	ND <0.005	ND <0.005	ND <0.005	All ND
B15 @ 6'	7/29/2005	ND <1.0	ND <1.0	ND <10	ND <0.005	ND <0.005	ND <0.005	ND <0.005	ND <0.005	All ND

TABLE 1: GROUNDWATER ANALYTICAL RESULTS
Former Zenker-Felt Motors
22 W. 4th Street, Eureka
LACO No. 4844.00

Sample Number	Sample Date	TPHg (µg/l)	TPHd (µg/l)	TPHmo (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethylbenzene (µg/l)	Xylenes (µg/l)	MTBE (µg/l)	Other Oxygenates (µg/l)	Lead Scavengers (µg/l)	Creosote (µg/l)	Halogenated Volatiles (µg/l)	Cam 5 Metals (µg/l)	EPA 601 (µg/l)	EPA 8310 (µg/l)	EPA 608 (µg/l)	TCP PCP (µg/l)
2000 Investigation																		
B1	5/17/2000	ND < 50	ND < 50	ND < 170	ND < 0.50	ND < 0.50	ND < 0.50	ND < 0.50	**2.3**	ND	ND	---	---	---	---	---	---	---
B2	5/17/2000	ND < 50	ND < 50	ND < 170	ND < 0.50	ND < 0.50	ND < 0.50	ND < 0.50	ND < 0.50	ND	ND	---	---	---	---	---	---	---
B3	5/17/2000	ND < 50	**170**	**420**	ND < 0.50	ND < 0.50	ND < 0.50	ND < 0.50	**0.9**	ND	ND	Absent	---	(total metals) **Cd ND Cr 180 PB 73 Ni 240 Zn 200**	ND < 1.0	ND	ND	ND
B4	5/17/2000	ND < 50	ND < 50	ND < 170	ND < 0.50	ND < 0.50	ND < 0.50	ND < 0.50	**2.5**	ND	ND	---	---	---	---	---	---	---
B5	5/17/2000	ND < 50	ND < 50	ND < 170	ND < 0.50	ND < 0.50	ND < 0.50	ND < 0.50	ND < 0.50	ND	ND	Absent	---	(total metals) **Cd ND Cr 230 PB 500 Ni 270 Zn 500**	ND < 1.0	ND	ND	ND
2001 Investigation																		
B6	11/13/2001	ND < 50	**360**	**10,000**	ND < 0.50	ND < 0.50	ND < 0.50	ND < 0.50	**1.9**	ND < 120	---	---	---	---	---	---	---	---
B7	11/13/2001	ND < 50	ND < 50	ND < 170	ND < 0.50	ND < 0.50	ND < 0.50	ND < 0.50	**1.8**	ND < 120	---	---	---	---	---	---	---	---
B8	11/13/2001	ND < 50	ND < 50	ND < 170	ND < 0.50	ND < 0.50	ND < 0.50	ND < 0.50	**2.1**	ND < 120	---	---	---	---	---	---	---	---
2002 Investigation																		
B9	2/22/2002	ND < 50	ND < 50	ND < 170	ND < 0.50	ND < 0.50	ND < 0.50	ND < 0.50	ND < 3.0	---	---	---	---	---	---	---	---	---
B10	2/22/2002	ND < 50	ND < 50	ND < 170	ND < 0.50	ND < 0.50	ND < 0.50	ND < 0.50	**5.0**	---	---	---	---	---	---	---	---	---
B11	2/22/2002	ND < 50	ND < 50	ND < 170	ND < 0.50	ND < 0.50	ND < 0.50	ND < 0.50	**3.8**	---	---	---	---	---	---	---	---	---
2005 Investigation																		
B12	1/24/2005	ND < 50	ND < 50	ND < 170	ND < 0.50	ND < 0.50	ND < 0.50	ND < 0.50	ND < 1.0	ND	---	---	---	---	---	---	---	---
B13	7/29/2005	ND < 50	**210**	**4,300**	ND < 0.50	ND < 0.50	ND < 0.50	ND < 0.50	ND < 1.0	All ND	---	---	All ND	*All ND	---	---	---	---
B14	7/29/2005	ND < 50	**52**	**2,000**	ND < 0.50	ND < 0.50	ND < 0.50	ND < 0.50	**4.5**	All ND	---	---	All ND	*All ND	---	---	---	---
B15	7/29/2005	ND < 50	ND < 50	ND < 170	ND < 0.50	ND < 0.50	ND < 0.50	ND < 0.50	ND < 1.0	All ND	---	---	All ND	*All ND	---	---	---	---

Fuel Oxygenates include: di-isopropyl ether (DIPE), methanol, ethanol, ethyl tertiary butyl ether (ETBE), tert-amyl methyl ether (TAME) and tert-butyl alcohol (TBA)

Lead Scavengers (former fuel additives): ethylene dibromide (EDB), dichloroethane (DCA), dichlorobenzene, and chlorobenzene.

* Dissolved Metals (filtered)

TABLE 1: Tank Pull Soil and Groundwater Lab Results
Zenker-Felt Motors
Eureka, CA
LACO No. 4844.01

SOIL								
Sample Number	**Sample Date**	**TPHg (µg/g)**	**Benzene (µg/g)**	**Toluene (µg/g)**	**Ethylbenzene (µg/g)**	**Xylenes (µg/g)**	**TPHd (µg/g)**	**grease & Oil (µg/g)**
Tank Pull								
Zink 9' west	7/25/1990	ND <1.0	ND <0.05	ND <0.05	ND <0.05	ND <0.025	ND <1.0	ND <250
Zink 9' east	7/25/1990	ND <1.0	ND <0.05	ND <0.05	ND <0.05	ND <0.025	ND <1.0	ND <250
GROUNDWATER								
Sample Number	**Sample Date**	**TPHg (µg/L)**	**Benzene (µg/L)**	**Toluene (µg/L)**	**Ethylbenzene (µg/L)**	**Xylenes (µg/L)**	**TPHd (µg/L)**	**grease & Oil (µg/L)**
Tank Pull								
Zink 12' middle	7/25/1990	**6,000**	ND <10	**13**	**23**	**140**	**22,000**	**44**